



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,100	07/30/2001	Jari Ijas	460-010468-US(PAR)	2593
2512	7590	04/21/2006	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			QUIETT, CARRAMAH J	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/918,100		IJAS ET AL.	
	Examiner		Art Unit	
	Carramah J. Quiett		2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17 and 18 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-8 and 10-16 is/are rejected.
- 7) ☒ Claim(s) 2,5 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/06/2006 has been entered.

Response to Amendment

2. The amendment(s), filed on 01/05/2006, have been entered and made of record. Claims 1-18 are pending.

Response to Arguments

3. Applicant's arguments, see page 13, filed 01/05/2006, with respect to Claims 13 and 17 have been fully considered and are persuasive. The objection of claims 13 and 17 has been withdrawn.

4. Applicant's arguments, see page 13, filed 01/05/2006, with respect to Claims 13 and 17 have been fully considered and are persuasive. The 112 rejection of claims 14-15 and 17-18 has been withdrawn.

5. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

6. **Claim 4** is objected to because of the following informalities: Claim 4 is recited as, “4. (Currently Amended) The device wherein the device further comprises electronic display means for *display* data and information arranged on at least one of said adjacent walls...” The term “display” should be changed to “displaying” for grammatical purposes.

Note: Respectfully, please verify and correct other minor informalities in *every* claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claims 1, 4, 6, 8, 11-13 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417).

For **claim 1**, Suso discloses a portable, foldable electronic device (an information communication terminal device, figs. 1-5) comprising an opened use and a closed use position (figs. 3a and 3b; col. 3, lines 45-57), said device comprising at least:

a first housing part comprising at least an inner wall (fig. 3b, ref. 1),

a second housing part comprising at least an inner wall (fig. 3b, ref. 2);

a hinge mechanism (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5) arranged to fold the first and the second housing parts in the closed use position in relation to each other for a first use position, wherein the inner walls are against each other (fig. 3a; col. 3, lines 45-52), and in the open use position for a second use position (col. 3, lines 54-58; col. 4, lines 30-38), wherein the inner walls are adjacent to each other (fig. 3b). Although Suso states that when the device is closed it is in a non-use state in col. 4, lines 26-28, it is inherent that Suso's device has a use for the closed position. When device is in the closed position, this position is used to protect the parts of the phone when the device is in someone's pocket. Additionally, this device is still in use when it's in the closed position because the phone can ring to notify the operator of an incoming call,

an electronic display (fig. 1a, refs. 4,5) fitted on at least one of said inner wall and arranged for displaying information to the user in the opened use position (figs. 1/3a), when the device is on the palm and the display is directed at the user. Please see figs. 4-5d, which shows Suso's device being operated at different angles. This allows the device to display information to the user in the opened position (fig. 1), when the device is on the palm or on a base and the display is directed at the user. Please read col. 4, lines 11-60, and

a third housing part (fig 1a, ref. 8) arranged for holding the device on the palm in the first and second use positions (col. 2, line 54 – col. 3, line 5; col. 4, lines 11-60 and illustrated in figs. 1a-1b) comprising a first wall (facing out of the page) to be placed transversely to the user's palm (figs. 4, 5b-5c; due the various positions of the device, its inherent that a user can choose to arrange the third housing for holding in any manner), an opposite wall (facing into of the page) on the opposite side of the third housing part in relation to said first wall, two adjacent walls (right and left) between said first wall and said opposite wall, and an upper wall (abuts the bottom portion of the first housing, ref. 1);

wherein the hinge mechanism (fig. 1a, refs. 6 and 7) is fitted on the side of said opposite wall (facing into of the page) and arranged for folding the first and the second housing parts also in relation to the third housing part (fig 1a, ref. 8). Please read col. 2, line 53 – col. 3, line 5;

wherein one of said adjacent walls (right and left) is provided with at least one key button (fig. 1c, ref. 11) within the reach of the fingers for controlling the electronic functions of the device col. 2, line 57; col. 4, lines 63-67). When the power (another word for control) source button is turned on, a menu is displayed.

wherein said first wall, said upper wall or* an edge between said first wall and said upper wall is provided with a navigation key, said navigation key being within the reach of the forefinger, said navigation key being equipped also with a push-button function for making a selection and arranged rotatable in at least two opposite directions – Suso discloses a power source button (fig. 1c, ref. 11; col. 3, lines 23-25) at the rotary shaft, which is on the left edge of the housing member (fig. 1a, ref. 8). Together the power source button and the rotary shaft encompass a navigation key. This feature allows a user to turn on the device for selecting the

record mode (col. 4, line 63 – col. 5, line 4) and the option to rotate the camera (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5). On the right side of the housing member, there is a connector part (fig. 1b, ref. 3), which connects the electrically coupled housings (col. 1, line 52 – col. 2, line 12).

Suso does not expressly disclose a device wherein each one of said two adjacent walls is provided with at least one key button. In figs. 7-9, he discloses several navigation keys for browsing menus displayed on said electronic display. However, Suso also does not expressly disclose a menu browsing navigation key, wherein said first wall, said upper wall or* an edge between said first wall and said upper wall is provided with a navigation key.

In a similar field of endeavor, Yoshida discloses an information communication terminal device (fig. 1) comprising: two adjacent walls (figs. 1 and 2) wherein each one of said two adjacent walls to have at least one key button (103 and 110). Please read col. 5, lines 31-41. Yoshida also discloses a menu browsing navigation key (11), wherein said first wall, said upper wall or* an edge between said first wall and said upper wall is provided with the navigation key. a navigation key. Please read col. 5, lines 36-41 and col. 6, lines 33-37. In light of the teachings of Yoshida, it would have been obvious to one of ordinary skill in the art at the time the invention was made for to modify Suso's device wherein each one of the adjacent walls is provided with at least one key button and wherein a navigation key, for browsing menus displayed on said electronic display, is on said first wall, said upper wall or* an edge between said first wall and said upper wall. These modifications will allow a user to hold the device with the hand/fingers to naturally make contact with the key buttons or navigation key thereby easily executing the various functions of the device (Yoshida, col. 6, lines 33-37).

For claim 4, Suso, as modified by Yoshida, discloses the device wherein the device further comprises electronic display means for displaying data and information arranged on at least one of said adjacent walls (Suso, fig. 6; col. 4, line 63 – col. 7, line 15), and wherein said electronic display means are arranged for presenting information to the user (Suso, fig. 7) in the closed use position (inherently – Yoshida, fig. 1, ref. 104; col. 5, line 66 – col. 6, line 9). Additionally, as illustrated in figs. 1b and 1c, the electronic display housing of Suso abuts each adjacent wall (right and left) and is arranged for presenting information to the user in the closed position of the device. When the device is closed, this device is inherently still in use, via the infrared communication means (fig. 3a, ref. 10'). Since ref. 10', which is a communication means, it presents information to the user by transmitting information to a computer (col. 3, lines 59-65).

For claim 6, Suso, as modified by Yoshida, discloses the device wherein, the opened use position, the third housing part is on the opposite side of the device in relation to the inner walls, extending in a direction which is perpendicular to said inner walls. In Suso, please see figs. 1a and 3b; and read col. 2, lines 48-65.

For claim 8, Suso, as modified by Yoshida, discloses the device (please refer to the Suso reference), wherein one of the housing parts (fig. 1a, ref. 8) is provided with electronic image sensor means for still and/or video images (col. 2, lines 59-62), wherein said at least one button (fig. 1c, ref. 11) and the navigation key are also arranged for the control of said electronic image sensor means (col. 4, line 63 – col. 5, line 4). As stated earlier, together the power source button and the rotary shaft encompass a navigation key. This feature allows a user to turn on the device for selecting the record mode (col. 4, line 63 – col. 5, line 4) and the option to rotate (an

procedure for controlling) the camera (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5). On the right side of the housing member, there is a connector part (fig. 1b, ref. 3), which connects the electrically coupled housings (col. 1, line 52 – col. 2, line 12).

For **claim 11**, Suso, as modified by Yoshida, discloses the device, wherein the navigation key is a rotatable roll or a rocker key. In Suso, please see fig. 1a, refs. 6 and 7; and read col. 2, line 66 – col. 3, line 5; and col. 4, line 63 – col. 5, line 4.

For **claim 12**, Suso, as modified by Yoshida, discloses the device (please refer to the Suso reference) wherein the device is a communication device comprising at least a CMT user interface which is available in the closed use position of the device (1), and at least a PDA user interface which is available in the opened use position of the device (1). Please see figs. 3a and 7; and read col. 1, line 48 – col. 3, line 12. As mentioned in Suso's disclosure, his device is also a portable phone. When the device is closed, this device is inherently still in use, via the infrared communication means (fig. 3a, ref. 10'), because information from the device can be transmitted to a computer (col. 3, lines 59-65).

For **claim 13**, Suso discloses a handle arrangement for a portable (Note: Due to various positions of the device in Suso, it is inherent that a user can choose to hold the third housing in any manner. The handle arrangement can be the either one of the first, second, or third housings), foldable electronic device comprising two or* more use positions and comprising at least two housing parts (fig. 3b, refs. 1 and 2) foldable in relation to each other (figs. 3a and 3b; col. 3, lines 45-57) and a hinge mechanism (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5) arranged for connecting and folding the first and the second housing parts in relation to each

other (col. 2, line 66 – col. 3, line 5), wherein the handle arrangement comprises a handle-like third housing part (fig 1a, ref. 8) arranged for holding the device on the user's palm in the different use positions said third housing part comprising at least:

a first wall (facing out of the page) to be placed transversely against the user's palm (figs. 4, 5b-5c; **Note:** As stated before, due the various positions of the device, it is inherent that a user can choose to hold the third housing in any manner), and

an opposite wall (facing into of the page) on the opposite side of the third housing part in relation to said first wall,

two adjacent walls (right and left) between said first wall and an opposite wall, and

an upper wall (abuts the bottom portion of the first housing, ref. 1);

wherein said hinge mechanism (fig. 1a, refs. 6 and 7) is connected on said opposite wall (facing into of the page) (please read col. 2, line 53 thru col. 3, line 5), and

wherein one of said adjacent walls (right and left) is provided with at least one key button (fig. 1c, ref. 11) within the reach of the fingers for controlling the electronic functions of the device col. 2, line 57; col. 4, lines 63-67). When the power (another word for control) source button is turned on, a menu is displayed.

wherein said first wall, said upper wall or an edge between said first wall and said upper wall is provided with a navigation key within the reach of the forefinger, said navigation key being equipped also with a push-button function for making a selection and arranged rotatable in at least two opposite directions – Suso discloses a power source button (fig. 1c, ref. 11; col. 3, lines 23-25) at the rotary shaft, which is on the left edge of the housing member (fig. 1a, ref. 8). Together the power source button and the rotary shaft encompass a navigation key. This feature

allows a user to turn on the device for selecting the record mode (col. 4, line 63 – col. 5, line 4) and the option to rotate the camera (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5). On the right side of the housing member, there is a connector part (fig. 1b, ref. 3), which connects the electrically coupled housings (col. 1, line 52 – col. 2, line 12). Additionally, Suso's navigation keys are placed on the first or second housings (fig. 7, ref. 21a and fig. 8, ref. 23b).

Suso does not expressly disclose a device wherein each one of said two adjacent walls is provided with at least one key button. In figs. 7-9, he discloses several navigation keys for browsing menus displayed on said electronic display. However, Suso also does not expressly disclose a menu browsing navigation key, wherein said first wall, said upper wall or* an edge between said first wall and said upper wall is provided with a navigation key.

In a similar field of endeavor, Yoshida discloses an information communication terminal device (fig. 1) comprising: two adjacent walls (figs. 1 and 2) wherein each one of said two adjacent walls to have at least one key button (103 and 110). Please read col. 5, lines 31-41. Yoshida also discloses a menu browsing navigation key (11), wherein said first wall, said upper wall or* an edge between said first wall and said upper wall is provided with the navigation key. a navigation key. Please read col. 5, lines 36-41 and col. 6, lines 33-37. In light of the teachings of Yoshida, it would have been obvious to one of ordinary skill in the art at the time the invention was made for to modify Suso's device wherein each one of the adjacent walls is provided with at least one key button and wherein a navigation key, for browsing menus displayed on said electronic display, is on said first wall, said upper wall or* an edge between said first wall and said upper wall. These modifications will allow a user to hold the device with

the hand/fingers to naturally make contact with the key buttons or navigation key thereby easily executing the various functions of the device (Yoshida, col. 6, lines 33-37).

For **claim 16**, Suso discloses a handle arrangement for a portable (Note: Due to various positions of the device, it's inherent that a user can choose to hold the third housing in any manner. The handle arrangement can be the either one of the first, second, or third housings), foldable electronic device comprising two or* more use positions and comprising at least two housing parts (fig. 3b, refs. 1 and 2) foldable in relation to each other (figs. 3a and 3b; col. 3, lines 45-57) and a hinge mechanism (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5) arranged for connecting and folding the first and the second housing parts in relation to each other (col. 2, line 66 – col. 3, line 5), wherein the handle arrangement comprises a handle-like third housing part (fig 1a, ref. 8) arranged for holding the device on the user's palm in the different use positions, said third housing part comprising at least:

- a first wall (facing out of the page) to be placed transversely against the user's palm (figs. 4, 5b-5c; Note: As stated before, due the various positions of the device, it is inherent that a user can choose to hold the third housing in any manner), and

- an opposite wall (facing into of the page) on the opposite side of the third housing part in relation to said first wall,

- two adjacent walls (right and left) between said first wall and an opposite wall, and

- an upper wall (abuts the bottom portion of the first housing, ref. 1);

- wherein one of said housing parts (fig. 1a, refs. 6 and 7) directly is connected on said opposite wall (facing into of the page) (please read col. 2, line 53 thru col. 3, line 5), wherein the

hinge mechanism (fig. 1a, refs. 6 and 7) and the third housing part (fig 1a, ref. 8) are placed on opposite sides of said one of said housing parts (fig 1a, ref. 8), and

wherein one of said adjacent walls (right and left) is provided with at least one key button (fig. 1c, ref. 11) within the reach of the fingers for controlling the electronic functions of the device col. 2, line 57; col. 4, lines 63-67). When the power (another word for control) source button is turned on, a menu is displayed.

wherein said first wall, said upper wall or* an edge between said first wall and said upper wall is provided with a navigation key within the reach of the forefinger, said navigation key being equipped also with a push-button function for making a selection and arranged rotatable in at least two opposite directions – Suso discloses a power source button (fig. 1c, ref. 11; col. 3, lines 23-25) at the rotary shaft, which is on the left edge of the housing member (fig. 1a, ref. 8). Together the power source button and the rotary shaft encompass a navigation key. This feature allows a user to turn on the device for selecting the record mode (col. 4, line 63 – col. 5, line 4) and the option to rotate the camera (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5). On the right side of the housing member, there is a connector part (fig. 1b, ref. 3), which connects the electrically coupled housings (col. 1, line 52 – col. 2, line 12).

Suso does not expressly disclose a device wherein each one of said two adjacent walls is provided with at least one key button. In figs. 7-9, he discloses several navigation keys for browsing menus displayed on said electronic display. However, Suso also does not expressly disclose a menu browsing navigation key, wherein said first wall, said upper wall or* an edge between said first wall and said upper wall is provided with a navigation key.

10. **Claims 14 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417) as applied to claim 13 above, and further in view of Abe (JP Pub. #11-136655).

For **claim 14**, Suso, as modified by Yoshida, discloses the handle arrangement, wherein for reducing the outer dimensions of the device, the handle arrangement is arranged to store said hinge mechanism in a movable manner and at least partly inside the third housing part, or* the handle arrangement is arranged to insert one of said one housing parts at least partly in the third housing parts by using said hinge mechanism (please refer to the explanations below).

In Suso, figure 2 illustrates the assembly of the first, second, and third housings via the hinge mechanism (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5). Further, col. 3, lines 27-44 describes how the housings are inserted into the hinge mechanism. It is apparent that the first and the second housing parts are arranged to move away from the third housing part by separating the housings in reverse to the method for inserting the housings. Additionally, since Suso's device is capable of numerous positions (figs. 4 and 5a-5d) moving the first and second housing away from the third housing can apparently be completed before opening in opposite directions.

In a similar field of endeavor, Abe discloses the first (ref. 10a) and the second (ref. 10b) housing parts placed against each other are arranged (please see drawings 1 and 3), upon closing, to be partly inserted in the third housing part (ref. 30) to reduce the outer dimensions of the device. As illustrated in drawing 1, the device (ref. 10) consists of the first (ref. 10a) and second (10b) housings. When the second housing (ref. 10b) is inserted in the third housing (30), it inside the opening of the third housing, which leaves the first housing on the outside of the third

housing. This reduces the dimensions of device (ref. 10) to the first housing (ref. 10a) – see drawing 3. Similar to Suso, Abe's camera housing (ref. 31) is also rotatable (English translation of Abe, paragraphs 0051-0017). In light of the teaching of Abe, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Suso's invention with the housing insertion technique of Abe so that the consumer can choose whether or not he wants to have a camera on his communication device (Abe, paragraph [0010]).

For **claim 15**, Suso, as modified by Yoshida and Abe, discloses a handle arrangement wherein the third housing part allows also the folding of said one of said housing parts in relation to said third housing part. (Suso, figs. 4 and 5a-5d; Abe, figs. 1/3 and paragraphs 0051-0017).

11. **Claim 3** is rejected under 35 U.S.C. 103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417) as applied to claim 1 above, and further in view of Frye et al. (U.S. Pat. #6,188,765).

For **claim 3**, Suso, as modified by Yoshida, does not disclose the device, wherein said upper wall is provided with a key button within the reach of the forefinger for opening the first and the second housing parts automatically by means of the hinge mechanism. Instead, Suso's device has a hinge mechanism (fig. 1a, refs. 6 and 7) that rotates (col. 2, line 66- col. 3, line 5).

Frye discloses characterized in that said upper wall is provided with a key button (fig. 4, ref. 10) within the reach of the forefinger for opening the first and the second housing parts automatically by means of the hinge mechanism (col. 4, lines 17-41). In light of the teaching of Frye, it would have been obvious to one of ordinary skill in the art at the time the invention was

made to implement Suso's invention with the key button of Frye to assist a user of the handset in being able to open the phone using only one hand (Frye, col. 1, lines 49-50).

12. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417) as applied to claim 1 above, and further in view of Phillipps (GB Pub. #2314179A).

For **claim 7**, Suso, as modified by Yoshida, discloses the device wherein in the opened use position, the inner walls are parallel and placed adjacent to each other (see Suso – fig. 1), but they do not form a uniform inner wall.

In a similar field of endeavor, Phillipps discloses a portable electronic apparatus characterized in that in its opened position, the inner walls are parallel and placed adjacent to each other to form a uniform inner wall (Abstract, figure 5). Similar to Suso, Phillipps has three housings, which includes a hinge mechanism (fig. 5, ref. 13). In addition Phillipps' apparatus may be applied to a combined mobile telephone and computer apparatus (page 1, lines 24-28). In light of the teaching of Phillipps, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Suso's invention with the uniform inner wall of Phillipps so that information the device can be read or written similar to a book or notebook (Phillipps, page 2, lines 11-14).

13. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Suso et al. (U.S. Pat. #6,069,648) in view of Yoshida et al. (U.S. Pat. #6,690,417) as applied to claim 1 above, and further in view of Abe (JP Pub. #11-136655) and Frye et al. (U.S. Pat. #6,188,765).

For **claim 10**, Suso, as modified by Yoshida, discloses the device (please refer to Suso) the hinge mechanism comprises:

a hinge system (fig. 1a, refs. 6 and 7; col. 2, line 66 – col. 3, line 5) arranged for folding the first and the second housing parts in relation to each other and in relation to the third housing part (figs. 3a and 3b; col. 3, lines 45-57).

In Suso, column 3 lines 27-44, describes how the housings are inserted into the hinge mechanism. It is apparent that the first and the second housing parts can be ejected from the third housing part via the user by separating the housings in reverse to the method for inserting the housings. Since Suso's device is capable of numerous positions (figs. 4 and 5a-5d) moving the first and second housing away from the third housing can apparently be completed before opening in opposite directions. Additionally, the hinge mechanism allows one to rotate the camera housing (ref. 8).

Suso (nor Yoshida) does not disclose an ejector mechanism arranged to eject the first and the second housing parts wholly and the hinge system partly from the third housing part, and an unfolding mechanism arranged to assist in the opening of the first and the second housing parts in the opened use position.

In a similar field of endeavor, Abe discloses the first (ref. 10a) and the second (ref. 10b) housing parts placed against each other are arranged (please see drawings 1 and 3), upon closing, to be partly inserted in the third housing part (ref. 30) to reduce the outer dimensions of the device. As illustrated in drawings 1 and 3, the user can eject the first and second housings along with the hinge from the third housing. Similar to Suso, Abe's camera housing (ref. 31) is also rotatable (English translation of Abe, paragraphs 0051-0017). In light of the teaching of Abe, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Suso's invention with the housing insertion technique of Abe so that the consumer

can choose whether or not he wants to have a camera on his communication device (Abe, paragraph [0010]).

In a similar field of endeavor, Frye discloses a ridge (unfolding mechanism; fig. 4, ref. 10) within the reach of the forefinger for opening the first and the second housing parts automatically by means of the hinge mechanism (col. 4, lines 17-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Suso's invention with the ridge of Frye to assist a user of the handset in being able to open the phone using only one hand (Frye, col. 1, lines 49-50).

***Note:** The U.S. Patent and Trademark Office considers Applicant's "or" language to be anticipated by any reference containing one of the subsequent corresponding elements.

Allowable Subject Matter

14. **Claims 2, 5, and 9** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. **Claims 17 and 18** are allowed.

16. The following is a statement of reasons for the indication of allowable subject matter:

Claim 2 is allowed because the prior art does not teach or fairly suggest the device according to claim 1, wherein the first and the second housing parts are arranged to move away from the third housing part by using said hinge mechanism before opening in said opened use position, and wherein the first and the second housing parts, when placed against each other, are

arranged, upon closing in said closed use position, to be partly inserted in the third housing part by using said hinge mechanism to reduce the outer dimensions of the device.

For **claim 5**, the prior art does not teach or fairly suggest a device according to claim 1, wherein said electronic display comprises a partial display arranged on the inner wall of the first housing part and a partial display arranged on the inner wall of the second housing part, which are arranged for presenting information in at least two orientations transverse to each other for a vertical and a horizontal position of the device.

For **claim 9**, the prior art does not teach or fairly suggest the device according to claim 8, wherein the electronic image sensor means comprise a turnable camera arm extending from the third housing part in between the first and the second housing parts, and wherein the first and the second housing parts are provided with a space and a transparent housing for the camera arm and for protecting it.

For **claim 17**, the prior art does not teach or fairly suggest a portable, foldable electronic device comprising an opened use and a closed use position, said device comprising at least:

said electronic display comprises a partial display arranged on the inner wall of the first housing part and a partial display arranged on the inner wall of the second housing part, which are arranged for presenting information in at least two orientations transverse to each other for a vertical and a horizontal position of the device (in combination with the other claimed features).

For **claim 18**, the prior art does not teach or fairly suggest a portable, foldable electronic device comprising an opened use and a closed use position, said device comprising at least:

the electronic image sensor means comprise a turnable camera arm extending from the third housing part in between the first and the second housing parts, and wherein the first and the

second housing parts are provided with a space and a transparent housing for the camera arm and for protecting it (in combination with the other claimed features).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carramah J. Quiett whose telephone number is (571) 272-7316. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CJQ
April 14, 2006


NGOC-YEN VU
SUPERVISORY PATENT EXAMINER